MEMORANDUM FOR: All NWS Regional Headquarters, Regional Maintenance

Specialists, Electronic Systems Analysts, and Electronics Technicians [Engineering Handbook

(EHB)-13, Series II distribution]

FROM: W/OPS1 - John McNulty

SUBJECT: Transmittal Memorandum for EHB-13 Series II,

Issuance 01-13

1. <u>Material Transmitted:</u>

Engineering Handbook No. 13 Series II, Advanced Weather Interactive Processing System (AWIPS), section 3.1, AWIPS Software Installation Instruction Note 17, Maintenance Release 5.0.3. Patch number P50_PRC_A100120.

2. <u>Summary:</u>

AWIPS Software Installation Instruction Note 17, provides instructions for maintenance release 5.0.3 on installing 11 patches.

3. <u>Effect on Other Instructions:</u>

None. File this note in EHB-13, Series II, section 3.1.



ENGINEERING HANDBOOK 13

SERIES II

SECTION 3.1

AWIPS SOFTWARE INSTALLATION INSTRUCTION NOTE 17

(for Electronic Systems Analysts)

Maintenance, Logistics, & Acquisition Division

W/OPS12: FJZ

SUBJECT : Maintenance Release 5.0.3.

PURPOSE : Provide patch installation instructions for 11 patches.

TRACKING

: P50_PRC_A100120

NUMBER

AUTHORIZATION: The authority for this modification note is Request for Change AA201.

AFFECTED SITES: All AWIPS Build 5.0 sites must install this release.

VERIFICATION STATEMENT

: Release 5.0.3 and installation procedures were tested and verified at National Weather Service Headquarters NMTW/NMTR, Silver Spring, MD (SLVM2); Pittsburg, PA WFO (PBZ); Eastern Region Headquarters (VUY);

and Southern Region Headquarters (EHU).

REINSTALLATION: None

REQUIREMENTS

TIME REQUIRED: Approximately 15 minutes

SECURITY LEVEL: root

TECHNICAL SUPPORT

: For questions or problems regarding these installation instructions or installing this Release, please contact the NCF at 301-713-9344.

GENERAL

This maintenance release provides instructions to install 11 patches. The summary of R5.0.3 fixes are as follows:

- Cleanup /var/tmp on each workstation (DR# 7612)
- Update Informix parameters (DR# 7766)
- Update OmniBack configuration files (DR# 6630)
- Fix routerStoreText process for LDAD (DR# 7338)
- Disable Execution of sfc_qc.exe in LAPS (DR# 7796)
- Install Shapefile patch (DR# 7514 P50 MDL A100113)
- Install Flash Flood Guidance patch (DR# 7704 P50_FSL_A100114)
- Fix link to AWIPS User Manual (DR# 7590 P50 SEC 100108)
- Fix error handling in MakeSUMMpage (DR# 7505 P50 SEC 100112)
- Disable "fxa" cron on all workstations (DR# 8108)
- Install R5.0 IFPS patch (P50_MDL_A100109) For R5.0 IFPS sites only

A detailed description of th R5.0.3 maintenance release is as follows:

- P Cleanup /var/tmp on each workstation (DR# 7612)
 - N Cleans up inodes for workstation "/var/tmp" directory.
 - **N** Installs new workstation root cron to maintain directory.
 - N This cleanup results in improved workstation performance.
- P Update Informix parameters (DR# 7766)
 - **N** Modifies selected Informix configuration parameters which will significantly improve database processing and performance.
- P Update OmniBack configuration files (DR# 6630)
 - N Recent changes to the AWIPS design has placed static configuration files in the "/data/fxa/workFiles" and "/data/fxa/customFiles" subdirectories.
 - N These subdirectories have now been added the the OmniBack Full Backups.
- P Fix routerStoreText process for LDAD (DR# 7338)
 - **N** Creates "/data/fxa/LDAD/Text" directory and "/awips/fxa/data/LdadWmoAwipsId.tbl", if missing, to enable "routerStoreText" process to store LARC data.
- P Disable Execution of sfc gc.exe in LAPS (DR# 7796)
 - N Update "sched.pl" file to disable "sfc_qc.exe" processing.
 - N sfc_qc.exe makes use of the Kalman filter to give a significant improvement in the LAPS surface data quality control, which leads to a noticably better analyses of surface fields. Disabling the function, reduces the processing load on AS2 by as much as 50%.
- P Install Shapefile patch (DR# 7514 P50 MDL A100113)
 - **N** Updates the "makeWWAtables.csh" script which allows long name Public Forecast Zone shapefiles to be used in warngen and WWA in D2D.
- P Install Flash Flood Guidance patch (DR# 7704 P50_FSL_A100114)
 - **N** Fixes the display of the zones-based FFG products. Currently, if either County FFG or Zone FFG is selected from the Surface menu, only the county-based FFG numbers are displayed.
- P Fix Netscape link to AWIPS User Manual for R5.0 (DR# 7590 P50_SEC_100108)
 - N This allows site access from an AWIPS workstation to the R5.0 AWIPS User Manual being served by the new centralized document WWW server at the NCF.
- P Fix error handling in MakeSUMMpage (DR# 7505 P50 SEC 100112)
 - N MakeSUMMpage does not handle two conditions:
 - No webserver running on target LDAD server
 - LDAD server has its webserver running, but the requested file cannot be found
 - N In each case, MakeSUMMpage will continually attempt to read its dead socket connection to the remote machine and log an endless stream of error messages to "/data/logs" until the disk partition fills up.

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- P Disable "fxa" cron on all workstations (DR# 8108)
 - N The cron manages the processes responsible for monitoring the CPU and disk utilization on each workstation for the Netscape Data Monitor. This means that the workstation's CPU Monitor will not update. The Performance Working Group has determined that these processes may be contributing to poor workstation performance. Disabling these processes should alleviate the "jerky cursor problem" and improve overall workstation responsiveness. NCF ITO monitoring capabilities will continue to monitor AWIPS workstations for CPU and disk utilization.
- P Install R5.0 IFPS patch (P50_MDL_A100109) For R5.0 IPFS sites only. The patch provides solutions to the following IFPS deficiencies:
 - **N** IGR crashes if number of neighboring matrices is greater than the number of local matrices.
 - N Processing of day 7 maximum or minimum temperatures within the ZFP.
 - N Processing of previous matrices within IGR.
 - N Sprayback does not cover days 6 & 7.
 - N Prod hdr corrupts RDF if maximum and/or minimum temperatures are negative.
 - N ZFP crashes if phase and probably change at the same projection.
 - N Formatters are not reading cntrl_const table correctly. As a result, factory settings could be used instead of the site defined control constants.
 - **N** Master menu fails to create combination map if the user visits a cycle that already has a combination map created.
 - N Incorrect use of HIGH/HIGHS & LOW/LOWS in combined extended forecast periods
 - **N** Model interpretation retains Precip type grids from projections where ProbPrecip grids are has a combination map created.
 - N The ifps directory under /data/logs/adapt is deleted if IFPS is not ran on a workstation within three days.
 - N Unloading fails on second trip if POP grids are modified.

PROCEDURE

A. Maintenance Release download and Installation Procedure

NOTE:

PRC has pushed the "R5.0.3.tar.Z" and "R5.0.3_README" to all AWIPS sites. The files are stored on ds1 in the "/data/local/R5.0.3" directory. The installation instructions are also available in the "R5.0.3 README" file.

- 1. Log out of all D2D sessions and Text Workstations.
- 2. At a workstation, open a telnet window and log in to ds1 as **root** by typing:

3. Change to the "/data/local/R5.0.3" directory by typing:

4. Create a script output log file by typing:

5. Uncompress the release bundle by typing:

6. Run the installation script by typing:

7. Stop the script output log file created in step 4 by typing:

./stopscript

NOTE: Post Installation Procedures:

- 1. Forecasters **must** restart D2D and Text workstation sessions.
- 2. If IFPS was updated by R5.0.3, please follow the configuration instructions found in the IFPS readme file:

"/awips/adapt/ifps/install/IFPS Focal Point readme.txt"

- 3. If IFPS is installed after R5.0.3, follow the instructions at the end of this README file or in section C in these installation instructions.
- 4. For details on Configuring Flash Flood Guidance in D2D, see the following file:

"/data/local/R5.03/README_FFG.configure"

This completes the maintenance release download and installation procedure.

B. Post Installation Checkout Procedures

1. On DS1 and DS2, verify that Informix is operational and replicating by typing:

onstat -m (Verify that the engine is completing checkpoints)

ps -ef | grep ontape (Verify that ontape -c is running (DS1 only))

2. Check for any files that may not have been copied correctly by typing:

grep busy R5.0.3.out (Look for any "cannot write: Text file busy" messages. If present, this file will have to be manually copied.)

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3. On DS1, verify "shefdecode" and "TextDB_Server" processes have restarted by typing:

ps -ef | grep tDB (Verify "TextDB_Server -Read" and

"TextDB_Server -Write" are running)

EHB-13, Ser II Issuance 01-13 05-18-01 4. On DS1 verify that MHS is operational by typing

cd /awips/ops/logs/ds1-<site>

tail -f msgreq_svr.log (Message request log for messages queued to go out)

tail -f msgrcv_svr.log (Message receive log for messages being received.

Minimum is one KeepAliveMessage per minute)

This completes the post installation checkout procedures.

C. R5.0 IFPS Patch Installation After R5.0.3 Installation

1. Before proceeding, ensure the R5.0 IFPS CD received from Training Center is installed.

NOTE: Sites installing R5.1.1 IFPS DO NOT need to install this patch.

2. At a workstation, open a telnet window and log in to ds1 as root by typing:

rlogin ds1-<site> -1 root

3. Change to the install directory by typing:

cd /data/local/R5.0.3

4. Create a script output log file by typing:

script -a R5.0.3IFPS.out

5. Run the IFPS portion of the R5.0.3 script by typing:

./install_P50_MDL_A100109

6. Stop the script output log file by typing:

./stopscript

D. Post Installation Checkout Procedures for the IFPS.

Follow the configuration instructions found in the IFPS readme file

"/awips/adapt/ifps/install/IFPS_Focal_Point_readme.txt."

REPORTING MODIFICATION

Report the completed modification on a WS Form A-26, Maintenance Record according to instructions in Engineering Handbook 4 (EHB-4), Engineering Management Reporting System (EMRS), Part 2, and appendix I. A sample A-26 form is attached. As an additional guide, use the information in the table below.

Block #	Block Type	Information						
5	Description	AWIPS maintenance release 5.0.3 Software Installation Instruction note 17.						
7	Equipment Code	AWIPS						
8	Serial Number	001						
15	Comments	Installed AWIPS maintenance release 5.0.3 I.A.W. Software Installation Instruction Note 17.						
17a	Mod. No.	S17						

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Chief, Maintenance, Logistics, and Acquisition Division

Attachment A

,	WS FORM A-26 (4/94)		WS FORM A -26 (4/94) US. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE ENGINEERING MANAGEMENT REPORTING SYSTEM MAINTENANCE RECORD US. DEPARTMENT OF COMMERCE Document Number C 49978													
General Information			1. Open Date 5 / 17 / 0	-			3. [3. Response Priority (check one) O Immediate O Low O Routine M Not Applicable					4. Close Date Time 5 / 17 / 01 1000			
5. Description AWIPS Maintenance Release 5.0.3 Software Installation Instructions Note 17																
Equipment Information			6. Station ID 7. Equipment Code AWIPS		8. Serial Number 001			9. TM M			10. AT M			11. How Mal. 999		
1 2. EQUIPMENT OPERATIONAL STATUS TIMES a. Fully Operational b. Logistics Delay Partly Operational C. All Other d. Logistics Delay Not Operational									onal e	· All Other						
	13. Parts Failure Information 14. Work Load Information															
Block #	ASIN				b. C. TM					d. AT	e. How Mal.	f. Qty.	g. Maint Hrs.	Туре		Staff Hrs.
1 2														JL	. Routine	
3														c	routine . Travel	
4													d	l. Misc.	1:00	
5														e	. Overtime	
Miscellaneous Installed AWIPS Maintenance Release 5.0.3 software I.A.W. AWIPS Software Installation Instructions Note 17																
17. SPECIAL PURPOSE REPORTING			a. Mod. No S17). l		Mod./Act./Deact.Date c. 5/17/01			d.			e	е.			
18. CONFIGURATION MGMT. REPORTING (use as directed)			ASN	Vendor Part Number			(New Par	Part) Serial Number (Old Part)				S	Serial Number (New Part)			